

CLAIM AMENDMENTS

1. (Currently Amended) A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating[[,]] provided on the hydrophilic surface, said coating comprising

[[-]] an infrared light absorbing agent and

[[-]] a polymer which comprises a phenolic monomeric unit, wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure -N=N-Q, wherein the -N=N- group is covalently bound to a carbon atom of the phenyl group, and wherein Q is an aromatic group.

2. (Currently Amended) [[A]] The lithographic printing plate precursor according to claim 1 wherein Q is a group comprising at least one heteroatom.

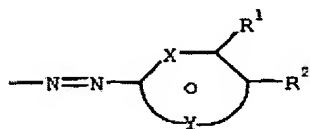
3. (Currently Amended) [[A]] The lithographic printing plate precursor according to claim 2 wherein said heteroatom is a nitrogen, an oxygen or a sulfur atom.

4. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~claims 1,2, or 3~~ claim 1 wherein Q has the structure -A- (T)_n wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system, wherein n is an integer[[,]] selected between 0 and the maximum available positions on the aromatic group A, wherein each T group is selected from -SO₂-NH-R¹, -NH-SO₂-R⁴, -CO-NR¹-R², -NR¹-CO-R⁴, -NR¹-CO-NR²-R³, -NR¹-CS-NR²-R³, -NR¹-CO-O-R¹, -O-CO-NR¹-R², -O-CO-R⁴, -CO-O-R⁴, -CO-R³, -SO₃-R¹, -O-SO₂-R⁴, -SO₂-R¹, -SO-R⁴, -P(=O)(-O-R¹)(-O-R²), -O-P(=O)(-O-R¹)(-O-R²), -NR¹-R², -O-R², -S-R², -N=N-R⁴, -CN, -NO₂, a halogenide [[or]] and -M-R¹, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R^1 , R^2 and R^3 are each independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 and R^5 are selected from [[an]] optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl [[or]] and heteroaralkyl ~~[group,]~~ groups, or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

5. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the -N=N-Q group comprises the following formula



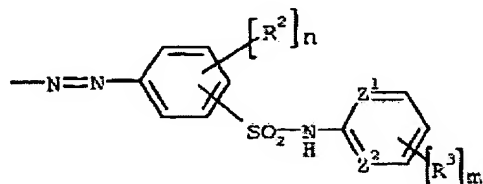
wherein X is CR^3 , NR^4 or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of CR^3 , NR^4 , N, S [[or]] and O,

wherein each R^1 , R^2 and R^3 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-SO_2-NH-R^5$, $-NH-SO_2-R^7$, $-CO-NR^5-R^6$, $-NR^5-CO-R^7$, $-O-CO-R^7$, $-CO-O-R^5$, $-CO-R^5$, $-SO_3-R^5$, $-SO_2-R^5$, $-SO-R^7$, $-P(=O)(-O-R^5)(-O-R^6)$, $-NR^5-R^6$, $-O-R^5$, $-S-R^5$, $-CN$, $-NO_2$, halogen [[or]] and $-M-R^5$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

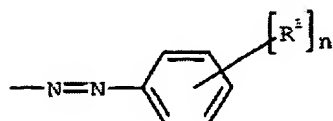
wherein R^4 , R^5 and R^6 are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^7 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1 to R^7 together represent the necessary atoms to form a cyclic structure.

6. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the -N=N-Q group comprises the following formula



wherein Z^1 and Z^2 are independently selected from CR^1 [[or]] and N, wherein R^1 is selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein n is 0, 1, 2, 3 or 4, wherein m is 0, 1, 2 or 3, wherein R^2 and R^3 are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-SO_2-NH-R^4$, $-NH-SO_2-R^6$, $-CO-NR^4-R^5$, $-NR^4-CO-R^6$, $-O-CO-R^6$, $-CO-O-R^4$, $-CO-R^4$, $-SO_3-R^4$, $-SO_2-R^4$, $-SO-R^6$, $-P(=O)(-O-R^4)(-O-R^5)$, $-NR^4-R^5$, $-O-R^4$, $-S-R^4$, $-CN$, $-NO_2$, halogen [[or]] and $-M-R^4$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^4 and R^5 are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^6 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1 to R^6 together represent the necessary atoms to form a cyclic structure.

7. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the -N=N-Q group comprises the following formula

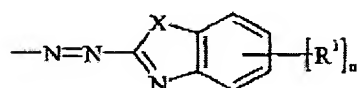


wherein n is 0, 1, 2, 3, 4, or 5,

wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO²-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen [[or]] and -M-R², wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R² and R³ are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁴ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
or wherein at least two groups selected from each R¹ to R⁴ together represent the necessary atoms to form a cyclic structure.

8. (Currently Amended) [[A]] The lithographic printing plate precursor according to any of claims 1 to 3 claim 1 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2, 3 or 4,

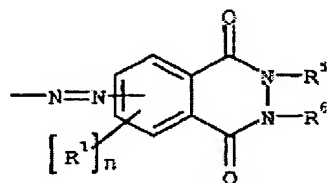
wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO₂-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen [[or]] and -M-R², wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein X is O, S or NR⁵,

wherein R², R³ and R⁵ are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁴ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

9. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the $-N=N-Q$ group comprises the following formula

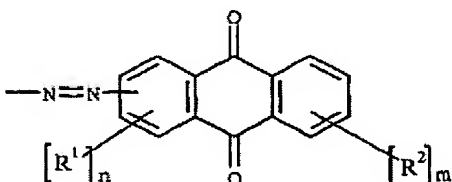


wherein n is 0, 1, 2 or 3,

wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-SO_2-NH-R^2$, $-NH-SO_2-R^4$, $-CO-NR^2-R^3$, $-NR^2-CO-R^4$, $-O-CO-R^4$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-SO_2-R^2$, $-SO-R^4$, $-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, $-CN$, $-NO_2$, a halogen [[or]] and $-M-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 , R^3 , R^5 and R^6 are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1 to R^4 together represent the necessary atoms to form a cyclic structure, or wherein R^5 and R^6 together represent the necessary atoms to form a cyclic structure.

10. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the $-N=N-Q$ group comprises the following formula



wherein n is 0, 1, 2 or 3,

wherein m is 0, 1, 2, 3 or 4, 3 wherein each R¹ and R² are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R³, -NH-SO₂-R⁵, -CO-NR³-R⁴, -NR³-CO-R⁵, -O-CO-R⁵, -CO-O-R³, -CO-R³, -SO₃-R³, -SO₂-R³, -SO-R⁵, -P(=O)(-O-R³)(-O-R⁴), -NR³-R⁴, -O-R³, -S-R³, -CN, -NO₂, a halogen [[or]] and -M-R³,

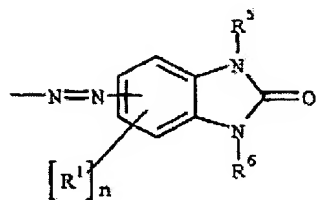
wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R³ and R⁴ are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁵ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R¹ to R⁵ together represent the necessary atoms to form a cyclic structure.

11. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the -N=N-Q group comprises the following formula

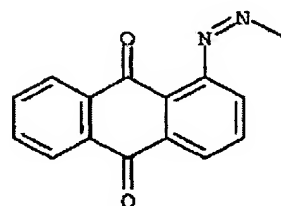
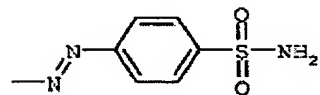
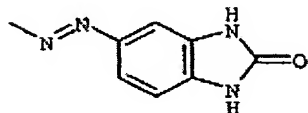
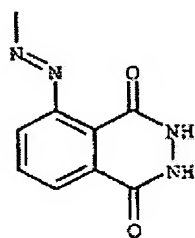
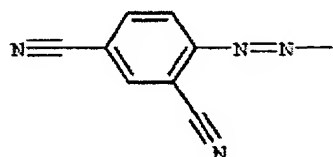
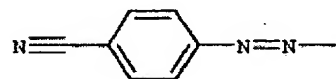
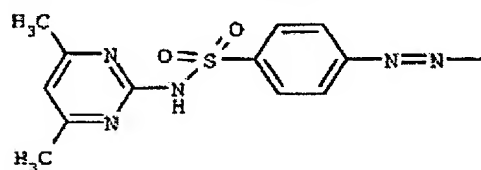


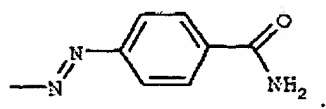
wherein n is 0, 1, 2 or 3,

wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO₂-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen [[or]] and -M-R², wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R², R³, R⁵ and R⁶ are independently selected from hydrogen [[or]] and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁴ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
or wherein at least two groups selected from each R¹ to R⁶ together represent the necessary atoms to form a cyclic structure.

12. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 3~~ claim 1 wherein the -N=N-Q group comprises one of the following ~~formula~~ formulae:





13. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of the preceding claims~~ claim 1, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

14. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of the preceding claims~~ claim 1, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

15. (Currently Amended) [[A]] The lithographic printing plate precursor according to claim 14, wherein said dissolution inhibitor is selected from the group consisting of

[[-]] an organic compound which comprises at least one aromatic group and a hydrogen bonding site, ~~and/or~~

[[-]] a polymer or surfactant comprising siloxane or perfluoroalkyl units, and mixtures thereof.

16. (Canceled)

17. (Currently Amended) [[A]] The lithographic printing plate precursor according to ~~any of claims 1 to 13~~ claim 1, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

18. (Canceled)

19. (New) The lithographic printing plate precursor according to claim 2 wherein Q has the structure -A- (T)_n

wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system,
wherein n is an integer selected between 0 and the maximum available positions on the aromatic group A,
wherein each T group is selected from -SO₂-NH-R¹, -NH-SO₂-R⁴, -CO-NR¹-R², -NR¹-CO-R⁴, -NR¹-CO-NR²-R³, -NR¹-CS-NR²-R³, -NR¹-CO-O-R¹, -O-CO-NR¹-R², -O-CO-R⁴, -CO-O-R⁴, -CO-R⁴, -SO₃-R¹, -O-SO₂-R⁴, -SO₂-R¹, -SO-R⁴, -P(=O)(-O-R¹)(-O-R²), -O-P(=O)(-O-R¹)(-O-R²), -NR¹-R², -O-R², -S-R², -N=N-R⁴, -CN, -NO₂, a halogenide and -M-R¹, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,
wherein R¹, R² and R³ are each independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
wherein R⁴ and R⁵ are selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
or wherein at least two groups selected from each R¹ to R⁵ together represent the necessary atoms to form a cyclic structure.

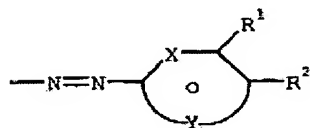
20. (New) The lithographic printing plate precursor according to claim 3 wherein Q has the structure -A- (T)_n
wherein A is a mono-cyclic 5- or 6-membered aromatic group or a 5- or 6-membered aromatic ring annelated with another ring system,
wherein n is an integer selected between 0 and the maximum available positions on the aromatic group A,
wherein each T group is selected from -SO₂-NH-R¹, -NH-SO₂-R⁴, -CO-NR¹-R², -NR¹-CO-R⁴, -NR¹-CO-NR²-R³, -NR¹-CS-NR²-R³, -NR¹-CO-O-R¹, -O-CO-NR¹-R², -O-CO-R⁴, -CO-O-R⁴, -CO-R⁴, -SO₃-R¹, -O-SO₂-R¹, -SO₂-R⁴, -SO-R⁴, -P(=O)(-O-R¹)(-O-R²), -O-P(=O)(-O-R¹)(-O-R²), -NR¹-R², -O-R², -S-R², -N=N-R⁴, -CN, -NO₂, a halogenide and -M-R¹, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R^1 , R^2 and R^3 are each independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 and R^5 are selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

21. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula



wherein X is CR^3 , NR^4 or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of CR^3 , NR^4 , N, S and O,

wherein each R^1 , R^2 and R^3 is selected from hydrogen, an optionally substituted alkyl,

alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

$-SO_2-NH-R^5$, $-NH-SO_2-R^7$, $-CO-NR^5-R^6$, $-NR^5-CO-R^7$, $-O-CO-R^7$, $-CO-O-R^5$, $-CO-R^5$,

$-SO_3-R^5$, $-SO_2-R^5$, $-SO-R^7$, $-P(=O)(-O-R^5)(-O-R^6)$, $-NR^5-R^6$, $-O-R^5$, $-S-R^5$, $-CN$, $-NO_2$,

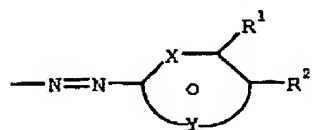
halogen and $-M-R^5$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R^4 , R^5 and R^6 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^7 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^7 together represent the necessary atoms to form a cyclic structure.

22. (New) The lithographic printing plate precursor according to claim 3 wherein the -N=N-Q group comprises the following formula



wherein X is CR³, NR⁴ or N,

wherein Y denotes the necessary atoms to form a 5- or 6-membered aromatic ring, said atoms being selected from the group consisting of CR³, NR⁴, N, S and O,

wherein each R¹, R² and R³ is selected from hydrogen, an optionally substituted alkyl,

alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

-SO₂-NH-R⁵, -NH-SO₂-R⁷, -CO-NR⁵-R⁶, -NR⁵-CO-R⁷, -O-CO-R⁷, -CO-O-R⁵, -CO-R⁵,

-SO₃-R⁵, -SO₂-R⁵, -SO-R⁷, -P(=O)(-O-R⁵)(-O-R⁶), -NR⁵-R⁶, -O-R⁵, -S-R⁵, -CN, -NO₂,

halogen and -M-R⁵, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R⁴, R⁵ and R⁶ are independently selected from hydrogen and an optionally

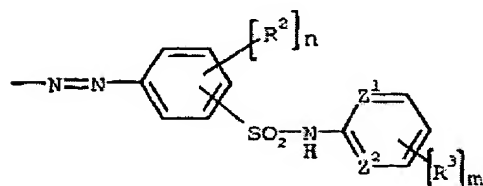
substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁷ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl,

heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R¹ to R⁷ together represent the necessary atoms to form a cyclic structure.

23. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula



wherein Z¹ and Z² are independently selected from CR¹ or N,

wherein R¹ is selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

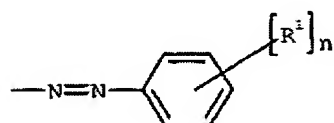
halogen and $-M-R^4$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R^4 and R^5 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^6 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^6 together represent the necessary atoms to form a cyclic structure.

25. (New) The lithographic printing plate precursor according to claim 2 wherein the $-N=N-Q$ group comprises the following formula



wherein n is 0, 1, 2, 3, 4, or 5,

wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-SO_2-NH-R^2$, $-NH-SO_2-R^4$, $-CO-NR^2-R^3$, $-NR^2-CO-R^4$, $-O-CO-R^4$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-SO_2-R^2$, $-SO-R^4$, $-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, $-CN$, $-NO_2$, a halogen and $-M-R^2$,

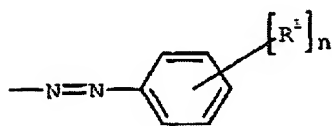
wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R^2 and R^3 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^4 together represent the necessary atoms to form a cyclic structure.

26. (New) The lithographic printing plate precursor according to claim 3 wherein the $-N=N-Q$ group comprises the following formula



wherein n is 0, 1, 2, 3, 4, or 5,

wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO₂-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen and -M-R²,

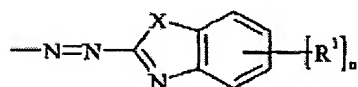
wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein R² and R³ are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁴ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R¹ to R⁴ together represent the necessary atoms to form a cyclic structure.

27. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2, 3 or 4,

wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO₂-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen and -M-R²,

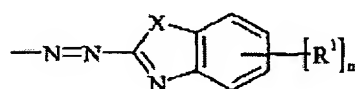
wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

wherein X is O, S or NR⁵,

wherein R², R³ and R⁵ are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,
or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

28. (New) The lithographic printing plate precursor according to claim 3 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2, 3 or 4,

wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-SO_2-NH-R^2$, $-NH-SO_2-R^4$, $-CO-NR^2-R^3$, $-NR^2-CO-R^4$, $-O-CO-R^4$, $-CO-O-R^2$, $-CO-R^2$, $-SO_3-R^2$, $-SO_2-R^2$, $-SO-R^4$, $-P(=O)(-O-R^2)(-O-R^3)$, $-NR^2-R^3$, $-O-R^2$, $-S-R^2$, $-CN$, $-NO_2$, a halogen and $-M-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

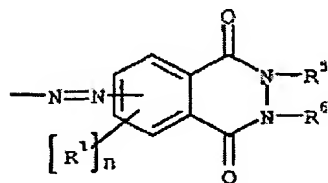
wherein X is O, S or NR^5 ,

wherein R^2 , R^3 and R^5 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

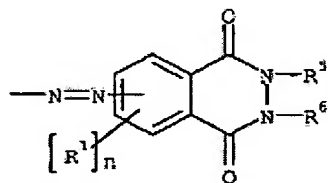
29. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2 or 3,

wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-\text{SO}_2-\text{NH}-R^2$, $-\text{NH}-\text{SO}_2-R^4$, $-\text{CO}-\text{NR}^2-R^3$, $-\text{NR}^2-\text{CO}-R^4$, $-\text{O}-\text{CO}-R^4$, $-\text{CO}-\text{O}-R^2$, $-\text{CO}-R^2$, $-\text{SO}_3-R^2$, $-\text{SO}_2-R^2$, $-\text{SO}-R^4$, $-\text{P}(=\text{O})(-\text{O}-R^2)(-\text{O}-R^3)$, $-\text{NR}^2-R^3$, $-\text{O}-R^2$, $-\text{S}-R^2$, $-\text{CN}$, $-\text{NO}_2$, a halogen and $-\text{M}-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 , R^3 , R^5 and R^6 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1 to R^4 together represent the necessary atoms to form a cyclic structure, or wherein R^5 and R^6 together represent the necessary atoms to form a cyclic structure.

30. (New) The lithographic printing plate precursor according to claim 3 wherein the $-\text{N}=\text{N}-\text{Q}$ group comprises the following formula

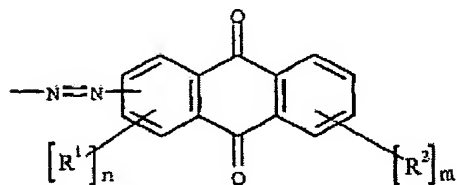


wherein n is 0, 1, 2 or 3, wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-\text{SO}_2-\text{NH}-R^2$, $-\text{NH}-\text{SO}_2-R^4$, $-\text{CO}-\text{NR}^2-R^3$, $-\text{NR}^2-\text{CO}-R^4$, $-\text{O}-\text{CO}-R^4$, $-\text{CO}-\text{O}-R^2$, $-\text{CO}-R^2$, $-\text{SO}_3-R^2$, $-\text{SO}_2-R^2$, $-\text{SO}-R^4$, $-\text{P}(=\text{O})(-\text{O}-R^2)(-\text{O}-R^3)$, $-\text{NR}^2-R^3$, $-\text{O}-R^2$, $-\text{S}-R^2$, $-\text{CN}$, $-\text{NO}_2$, a halogen and $-\text{M}-R^2$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^2 , R^3 , R^5 and R^6 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^4 together represent the necessary atoms to form a cyclic structure,

or wherein R^5 and R^6 together represent the necessary atoms to form a cyclic structure.

31. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2 or 3,

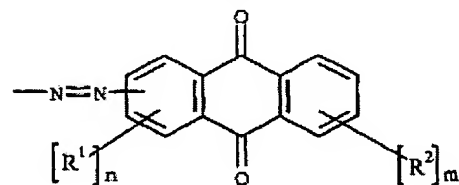
wherein m is 0, 1, 2, 3 or 4,

wherein each R^1 and R^2 are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-\text{SO}_2-\text{NH}-R^3$, $-\text{NH}-\text{SO}_2-R^5$, $-\text{CO}-\text{NR}^3-R^4$, $-\text{NR}^3-\text{CO}-R^5$, $-\text{O}-\text{CO}-R^5$, $-\text{CO}-\text{O}-R^3$, $-\text{CO}-R^3$, $-\text{SO}_3-R^3$, $-\text{SO}_2-R^3$, $-\text{SO}-R^5$, $-\text{P}(=\text{O})(-\text{O}-R^3)(-\text{O}-R^4)$, $-\text{NR}^3-R^4$, $-\text{O}-R^3$, $-\text{S}-R^3$, $-\text{CN}$, $-\text{NO}_2$, a halogen and $-\text{M}-R^3$, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R^3 and R^4 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^5 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^5 together represent the necessary atoms to form a cyclic structure.

32. (New) The lithographic printing plate precursor according to claim 3 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2 or 3,

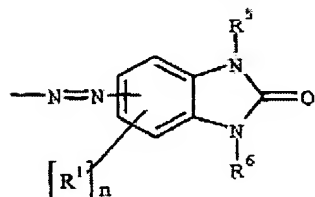
wherein m is 0, 1, 2, 3 or 4,

wherein each R¹ and R² are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R³, -NH-SO₂-R⁵, -CO-NR³-R⁴, -NR³-CO-R⁵, -O-CO-R⁵, -CO-O-R³, -CO-R³, -SO₃-R³, -SO₂-R³, -SO-R⁵, -P(=O)(-O-R³)(-O-R⁴), -NR³-R⁴, -O-R³, -S-R³, -CN, -NO₂, a halogen and -M-R³, wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R³ and R⁴ are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R⁵ is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R¹ to R⁵ together represent the necessary atoms to form a cyclic structure.

33. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises the following formula

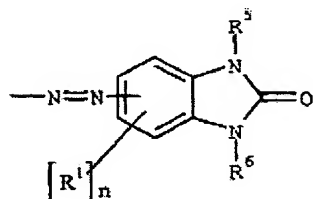


wherein n is 0, 1, 2 or 3,

wherein each R¹ is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, -SO₂-NH-R², -NH-SO₂-R⁴, -CO-NR²-R³, -NR²-CO-R⁴, -O-CO-R⁴, -CO-O-R², -CO-R², -SO₃-R², -SO₂-R², -SO-R⁴, -P(=O)(-O-R²)(-O-R³), -NR²-R³, -O-R², -S-R², -CN, -NO₂, a halogen and -M-R², wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein R², R³, R⁵ and R⁶ are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein at least two groups selected from each R^1 to R^6 together represent the necessary atoms to form a cyclic structure.

34. (New) The lithographic printing plate precursor according to claim 3 wherein the -N=N-Q group comprises the following formula



wherein n is 0, 1, 2 or 3,

wherein each R^1 is selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, $-\text{SO}_2-\text{NH}-R^2$, $-\text{NH}-\text{SO}_2-R^4$, $-\text{CO}-\text{NR}^2-R^3$, $-\text{NR}^2-\text{CO}-R^4$, $-\text{O}-\text{CO}-R^4$, $-\text{CO}-\text{O}-R^2$, $-\text{CO}-R^2$, $-\text{SO}_3-R^2$, $-\text{SO}_2-R^2$, $-\text{SO}-R^4$, $-\text{P}(=\text{O})(-\text{O}-R^2)(-\text{O}-R^3)$, $-\text{NR}^2-R^3$, $-\text{O}-R^2$, $-\text{S}-R^2$, $-\text{CN}$, $-\text{NO}_2$, a halogen and $-\text{M}-R^2$,

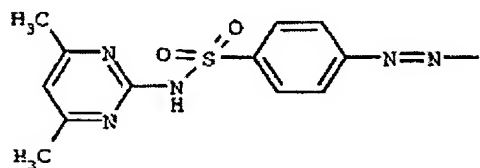
wherein M represents a divalent linking group containing 1 to 8 carbon atoms,

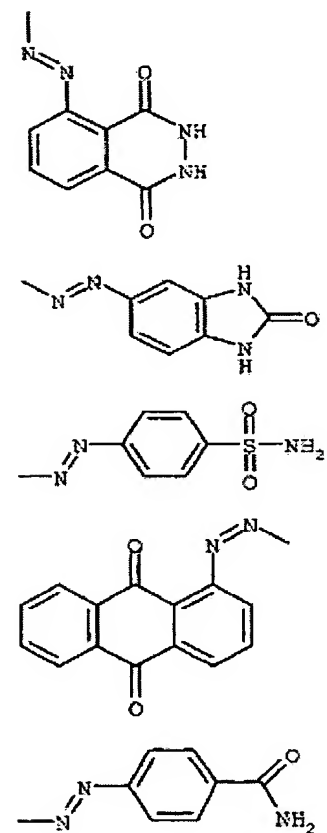
wherein R^2 , R^3 , R^5 and R^6 are independently selected from hydrogen and an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

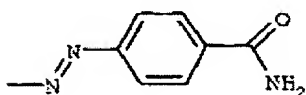
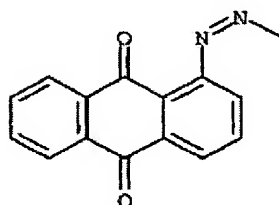
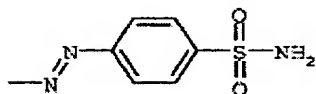
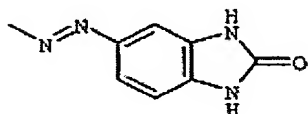
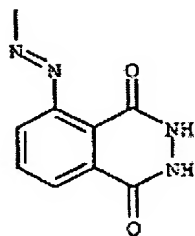
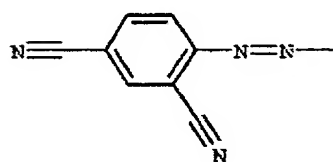
wherein R^4 is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

or wherein at least two groups selected from each R^1 to R^6 together represent the necessary atoms to form a cyclic structure.

35. (New) The lithographic printing plate precursor according to claim 2 wherein the -N=N-Q group comprises one of the following formulae:



Cc1cc(C)nc(NC(=O)S(=O)(=O)c2ccc(N=N)cc2)c1
N#Cc1ccc(N=N)cc1



37. (New) The lithographic printing plate precursor according to claim 2, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

38. (New) The lithographic printing plate precursor according to claim 3, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

39. (New) The lithographic printing plate precursor according to claim 4, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

40. (New) The lithographic printing plate precursor as amended in claim 5, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

41. (New) The lithographic printing plate precursor according to claim 6, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

42. (New) The lithographic printing plate precursor according to claim 7, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

43. (New) The lithographic printing plate precursor according to claim 8, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

44. (New) The lithographic printing plate precursor according to claim 9, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

45. (New) The lithographic printing plate precursor according to claim 10, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

46. (New) The lithographic printing plate precursor according to claim 11, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

47. (New) The lithographic printing plate precursor according to claim 12, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

48. (New) The lithographic printing plate precursor according to claim 2, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

49. (New) The lithographic printing plate precursor according to claim 3, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

50. (New) The lithographic printing plate precursor according to claim 4, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

51. (New) The lithographic printing plate precursor according to claim 5, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

52. (New) The lithographic printing plate precursor according to claim 6, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

53. (New) The lithographic printing plate precursor according to claim 7, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

54. (New) The lithographic printing plate precursor according to claim 8, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

55. (New) The lithographic printing plate precursor according to claim 9, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

56. (New) The lithographic printing plate precursor according to claim 10, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

57. (New) The lithographic printing plate precursor according to claim 11, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

58. (New) The lithographic printing plate precursor according to claim 12, wherein said coating further comprising a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

59. (New) A method for increasing the chemical resistance of a coating of a positive working heat-sensitive lithographic printing plate precursor, the method comprising providing a coating comprising:

a polymer which comprises a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure $-N=N-Q$ wherein the $-N=N-$ group is covalently bound to a carbon atom of the phenyl group and wherein Q is an aromatic group,
an infrared absorbing agent, and
a dissolution inhibitor.

60. (New) A method for increasing the chemical resistance of a coating of a negative working heat-sensitive lithographic printing plate, the method comprising providing a coating comprising:

a polymer which comprises a phenolic monomeric unit wherein the phenyl group of the phenolic monomeric unit is substituted by a group having the structure $-N=N-Q$ wherein the $-N=N-$ group is covalently bound is a carbon atom of the phenyl group and wherein Q is an aromatic group,
a latent Brönsted acid, and
an acid-crosslinkable compound.